

REMARKS

Initially, in the Office Action dated May 10, 2004, the Examiner rejects claims 1-47 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,707,813 (Hasan et al.). Claims 1-47 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,707,813 (Voit et al.) in view of U.S. Patent No. 6,421,674 (Yoakum et al.).

Claims 1-47 remain pending in the present application.

35 U.S.C. §102 Rejections

Claims 1-47 have been rejected under 35 U.S.C. §102(e) as being anticipated by Hasan et al. Applicants respectfully traverse these rejections.

Hasan et al. discloses call control in a packet-switched radio telecommunications network that minimizes delays in launching a voice call from a first Internet Protocol (IP)-based mobile station (MS) to a second IP-based MS. This includes preventing voice traffic from being routed to an Internet Service Provider and setting up an optimized path for voice traffic from the first MS to the second MS. The optimized path may be set up by creating a shortest route tunnel between a first serving GPRS service node (SGSN1) serving the first MS and a second SGSN serving the second MS. The tunnel also may be established between the base station controllers of each MS's serving radio base station.

Regarding claims 1, 13, 25, 33 and 44-47, Applicants submit that Hasan et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, carrying call control information after a call handover between an

IP-based protocol and a circuit-switched cellular network that includes generating a first message containing call control information, the first message being of an IP-based protocol or a circuit-switched cellular network, encapsulating the first message into a second message, transferring the second message to a network element, the network element being part of a circuit-switched cellular network or packet-switched network, encapsulating, at the network element, the second message into a third message, transferring the third message to a gateway, extracting, at the gateway, the first message from the third message, or sending the first message to a server in an IP packet-switched network or circuit-switched cellular network, where the first message is carried through the circuit-switched network or packet-switched network transparently. The Examiner asserts that Hasan et al. discloses a method for carrying call control information after a call handover from an IP packet-switched network to a circuit-switched cellular network. However, this is totally incorrect in that Hasan et al. is clearly related to only packet switched radio telecommunication networks (see col. 1, lines 63-66).

Further, the Examiner asserts that Hasan et al. discloses encapsulating a first message into a second message at col. 2, lines 30-45. However, these portions of Hasan et al. merely disclose that the invention of Hasan et al. relates to optimizing call control using two third generation IP mobile stations where third generation is the terminology used for launching multimedia or voice calls over packet switched mobile access systems. The call control protocol used is H.323 or SIP running over the IP-based PDP context. This is not encapsulating a first message into a second

message, as recited in the claims of the present application. These portions of Hasan et al. do not disclose or suggest a first message, or a second message or encapsulating a first message into a second message. These portions of Hasan et al. merely disclose using the H.323 or SIP call control protocol to optimize a call between two third generation IP-based mobile stations.

The Examiner further asserts that Hasan et al. discloses transferring the second message (with a first message encapsulated), to a network element where the network element is part of a circuit-switched cellular network at col. 2, line 59- col. 3, line 5. However, these portions of Hasan et al. merely disclose that several issues must be addressed from a call control perspective before the third generation system can start delivering voice calls with the quality and timeliness associated with circuit-switched conventional second generation systems, such as sending a multicast gatekeeper discovery message from the mobile station to a proxy agent and ensuring that only the operator in the public LAN mobile network services the multicast gatekeeper discovery message. These portions of Hasan et al. do not disclose or suggest anything related to transferring a second message, that includes an encapsulated first message to a network element where the network element is a part of a circuit-switched cellular network, as recited in the claims of the present application. These portions of Hasan et al. merely disclose that to use a third generation system several issues must be addressed to get the quality and timeliness associated with a circuit-switched conventional second generation system.

The Examiner further asserts that Hasan et al. discloses encapsulating at the network element (in the circuit-switched cellular network) the second message into a third message at col. 2, line 59 - col. 3, line 5, and col. 3, lines 32-52. However, the portion of Hasan et al., col. 2, line 59 - col. 3, line 5, has already been discussed as the Examiner also used it to assert that it disclosed transferring a second message to a network element. Further, the other portion of Hasan et al. cited by the Examiner merely discloses that system operators find it desirable to separate call control functions from the actual data transfer functions, problems associated with this, and associated solutions. This is not encapsulating at a network element in a circuit-switched network, a second message (that includes an encapsulated first message) into a third message, as recited in the claims of the present application. These portions of Hasan et al. merely disclose problems and solutions regarding separating the call control plane from the user plane in third generation calls. These portions of Hasan et al. have nothing to do with encapsulating or encapsulating a second message (within an encapsulated first message) into a third message.

Moreover, the Examiner asserts that Hasan et al. discloses extracting at a gateway the first message from the third message and sending the first message to a server at col. 4, lines 38-63. However, these portions of Hasan et al. merely disclose that the two CSCFS create a direct tunnel between the SGSNS for those two pairs of media sockets and details regarding the flow of messages between the nodes of a packet-switched mobile access system when establishing an optimized tunnel. These portions of Hasan et al. do not disclose or suggest anything related to

extracting at a gateway a first message from a third message, as recited in the claims of the present application. There is no disclosure in these portions of Hasan et al., or anywhere else, of a third message that includes an encapsulated second message that includes an encapsulated first message, where the first message is extracted from the third message at a gateway.

Further, the Examiner asserts that Hasan et al. discloses a first message being carried through a circuit-switched network transparently at col. 3, line 65-col. 4, line 15. However, these portions of Hasan et al. merely disclose transparently registering with the PLMN CSCF during registration without the aid of a proxy agent. As noted previously, Hasan et al. relates to call control in a packet-switched radio telecommunication network between a first IP-based mobile station and a second IP-mobile station. Hasan et al. does not disclose or suggest transferring a message from an IP packet switched network through a circuit-switched network transparently to another an IP packet switched network (or vice versa - from a circuit switched network through a packet switched network transparently to another circuit switched network), as recited in the claims of the present application.

Regarding claims 2-12, 14-24, 26-32 and 34-43, Applicants submit that these claims are dependent on one of independent claims 1, 13, 25 and 33 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. For example, Hasan et al. does not disclose or suggest where the circuit-switched network is an IS-136 network, or where the circuit-switched network is an IS-41 network.

Accordingly, Applicants submit that Hasan et al. does not disclose or suggest the limitations in the combination of each of claims 1-47 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.

35 U.S.C §103 Rejections

Claims 1-47 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Voit et al. in view of Yoakum et al. Applicants respectfully traverse these rejections.

Voit et al. discloses a communication system providing telephony communication across combined circuit-switched and packet-switched networks, such as telephone network and the Internet, which are connectable to terminals, such as telephones and computers, for selective communication therebetween. The communication system provides an architecture and methodology for handling resource allocation across carriers or service providers, settlements between carriers and service providers, usage accounting across carriers and service providers, and usage allocation among carriers or service providers.

Yoakum et al. discloses a system for implementing a real time distributed, hierarchical database using a proxiability protocol. The system includes a first proxy server for receiving a first proxiability protocol message from a first network element. The first proxy server performs a first database lookup based on information contained in the first message. If the first proxy server does not obtain the requested information, the first proxy server formulates a second proxiability protocol message

and forwards the message to a second proxy server. A second proxy server receives the second message and performs a second database lookup based on information contained in the second message. The second message sends the results from the second database lookup to the first proxy server and the first proxy server forwards the results to the database user.

Regarding claims 1, 13, 25, 33 and 44-47, Applicants submit that Hasan et al. does not disclose or suggest the limitations in the combination of each of these claims of, inter alia, carrying call control information after a call handover between an IP-based protocol and a circuit-switched cellular network that includes generating a first message containing call control information, the first message being of an IP-based protocol or a circuit-switched cellular network, encapsulating the first message into a second message, transferring the second message to a network element, the network element being part of a circuit-switched cellular network or packet-switched network, encapsulating, at the network element, the second message into a third message, transferring the third message to a gateway, extracting, at the gateway, the first message from the third message, or sending the first message to a server in an IP packet-switched network or circuit-switched cellular network, where the first message is carried through the circuit-switched network or packet-switched network transparently. The Examiner asserts that Voit et al. discloses encapsulating a first message containing call control information the first message being of an IP based protocol, into a second message at col. 4, lines 23-30. However, this portion of Voit et al. merely discloses that an Internet telephone gateway connects the packet-

switched and circuit-switched networks. This is not encapsulating a first message into a second message, as recited in the claims of the present application. A gateway connecting two networks together does not disclose or suggest encapsulating. Further, these portions of Voit et al. do not disclose or suggest anything related to a first message being encapsulated into a second message.

The Examiner further asserts that these same portions of Voit et al. disclose transferring a second message to a network element, the network element being a part of a circuit-switched cellular network. However, connecting a packet-switched and circuit-switched network via a gateway does not disclose or suggest anything related to transferring a second message, with an encapsulated first message, to a network element part of a circuit-switched cellular network, as recited in the claims of the present application. Connecting two networks together does not disclose or suggest transferring a second message with an encapsulated first message.

The Examiner further asserts that these same portions (col. 4, lines 23-30) of Voit et al. disclose encapsulating at the network element in the circuit-switched network the second message into a third message. However, as has been stated previously, the simple connection of two networks via a gateway is not encapsulating, as recited in the claims of the present application. Further, these portions of Voit et al. do not disclose or suggest anything related to a third message, with an encapsulated second message, that includes an encapsulated first message, or transferring the third message to a gateway.

Regarding claims 2-12, 14-24, 26-32 and 34-43, Applicants submit that these claims are dependent on one of independent claims 1, 13, 25 and 33 and, therefore, are patentable at least for the same reasons noted regarding these independent claims. For example, Applicants submit that none of the cited references disclose or suggest where the circuit-switched is an IS-136 network, or where a first packet-switched gateway is a third generation IP gateway, or where the second packet-switched gateway is a gateway GPRS support node, or where the circuit-switched cellular network is a GSM network.

Accordingly, Applicants submit that none of the cited references, taken alone or in any proper combination, disclose, suggest or render obvious the limitations in the combination of each of claims 1-47 of the present application. Applicants respectfully request that these rejections be withdrawn and that these claims be allowed.


In view of the foregoing amendments and remarks, Applicants submit that claims 1-47 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested.

U.S. Application No. 09/617,817

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (referencing attorney docket no. 0172.38719X00).

Respectfully submitted,

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